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Proposed programme budget for the biennium 1998-1999*

Part XI Capital expenditures

Section 31
Construction, alteration, improvement and major maintenance

(Programme 24 of the medium-term plan for the period 1998-2001)

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* The present document contains section 31 of the proposed programme budget for the biennium 1998-1999. The complete proposed programme budget will subsequently be issued in final printed form as *Official Records of the General Assembly, Fifty-second Session, Supplement No. 6* (A/52/6/Rev.1).

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Section 31
Construction, alteration, improvement and major maintenance
(Programme 24 of the medium-term plan for the period 1998-2001)

Overview

Table 31.1 **Summary of requirements by component**
(Thousands of United States dollars)

Component	1994-1995 expenditures	1996-1997 appropriations	Resource growth		Total before recosting	Recosting	1998-1999 estimates
			Amount	Percentage			
A. Construction	17 241.9	—	—	—	—	—	—
B. Alteration and improvement	22 652.8	13 910.8	(912.8)	(6.5)	12 998.0	593.6	13 591.6
C. Major maintenance	13 525.2	14 738.0	6 333.8	42.9	21 071.8	1 230.0	22 301.8
Total	**53 419.9**	**28 648.8**	**5 421.0**	**18.9**	**34 069.8**	**1 823.6**	**35 893.4**

Table 31.2 **Summary of requirements by programme**
(Thousands of United States dollars)

	1994-1995 expenditures	1996-1997 appropriations	Resource growth		Total before recosting	Recosting	1998-1999 estimates
			Amount	Percentage			
A. Construction							
ECA	17 241.9	—	—	—	—	—	—
Total A	**17 241.9**	**—**	**—**	**—**	**—**	**—**	**—**
B. Alteration and improvement							
1. United Nations Headquarters	8 606.1	6 308.0	(1 634.3)	(25.9)	4 673.7	278.5	4 952.2
2. United Nations Office at Geneva	12 685.4	5 171.2	(1 499.7)	(29.0)	3 671.5	(21.8)	3 649.7
3. United Nations Office at Vienna	—	—	1 906.8	—	1 906.8	31.0	1 937.8
4. United Nations Office at Nairobi	156.9	88.8	245.7	276.6	334.5	72.7	407.2
5. ESCAP	447.7	1 643.2	(1 273.6)	(77.5)	369.6	24.5	394.1
6. ECLAC	620.3	489.6	440.3	89.9	929.9	94.8	1 024.7
7. ECA	136.4	210.0	902.0	429.5	1 112.0	113.9	1 225.9
Total B	**22 652.8**	**13 910.8**	**(912.8)**	**(6.5)**	**12 998.0**	**593.6**	**13 591.6**

	1994-1995 expenditures	1996-1997 appropriations	Resource growth Amount	Resource growth Percentage	Total before recosting	Recosting	1998-1999 estimates
C. Major maintenance							
1. United Nations Headquarters	8 277.2	6 080.4	3 368.5	55.3	9 448.9	560.2	10 009.1
2. United Nations Office at Geneva	2 085.0	3 105.3	1 609.2	51.8	4 714.5	(35.1)	4 679.4
3. United Nations Office at Vienna	175.0	650.0	—	—	650.0	—	650.0
4. United Nations Office at Nairobi	1 141.5	1 306.7	(64.1)	(4.9)	1 242.6	273.1	1 515.7
5. ESCAP	1 117.8	1 273.5	1 814.5	142.4	3 088.0	234.6	3 322.6
6. ECLAC	242.9	806.5	76.3	9.4	882.8	90.1	972.9
7. ECA	485.8	757.8	287.2	37.8	1 045.0	107.1	1 152.1
8. UNTSO	—	757.8	(757.8)	(100.0)	—	—	—
Total C	**13 525.2**	**14 738.0**	**6 333.8**	**42.9**	**21 071.8**	**1 230.0**	**22 301.8**
Total A, B and C	**53 419.9**	**28 648.8**	**5 421.0**	**18.9**	**34 069.8**	**1 823.6**	**35 893.4**

31.1 The activities under this section are described in subprogramme 24.4, Support services, of programme 24, Administrative services, of the medium-term plan for the period 1998-2001 (A/51/6/Rev.1, paras. 24.18 and 24.19).

31.2 The activities of the subprogramme relating to buildings management are undertaken at Headquarters by the Buildings Management Service, Office of Conference and Support Services. Within their respective spheres, the organizational units of United Nations offices away from Headquarters and at the regional commissions undertaking general support services also carry out the activities under the subprogramme. Those units include, *inter alia*, General Services within the Division of Administration at the United Nations Office at Geneva, the Division of Administration and Common Services at the United Nations Office at Vienna, the Division of Administrative Services at the United Nations Office at Nairobi and the divisions of administration at the regional commissions. Although the activities of the subprogramme are performed individually by those units, that portion of resources requiring capital expenditures is requested centrally under this section in order to ensure a coordinated and systematic approach to problems of common concern related to facilities management, major maintenance and construction. However, the staff and related costs of the activities are included under section 27 of the proposed programme budget for the biennium 1998-1999. As to coordination functions, Headquarters will no longer provide an integrated and coordinated management policy and guidelines on space standards and master development plans to locations outside Headquarters, services previously provided by the Overseas Property Management and Construction Unit (OPMCU). As indicated in the proposed programme budget for the biennium 1996-1997, the functions of OPMCU were subsumed under the Buildings Management Service.

31.3 The overall objectives of the subprogramme, as it relates to buildings management, are to provide effective and efficient planning, management, maintenance and operation for all existing physical facilities of the Organization; to provide electronic communication expertise for meeting facilities; to plan, in particular for offices away from Headquarters, new facilities and technical installations required for intergovernmental and inter-agency meetings and conferences, and to provide support for other mandated activities of the Organization.

31.4 Major maintenance requirements vary with the age of the building, type of construction, climate and adequacy of regular maintenance programmes. The majority of United Nations properties are over 20 years old, requiring more active intervention to prevent structural, functional and technical obsolescence. Further, with new technologies in communications, office automation and information management, modifications and alterations to the buildings become necessary to accommodate the specialized requirements of those technologies. For example, the application of energy-saving technologies to existing buildings requires significant architectural and engineering modifications. Similarly, new safety and environmental standards require the renovation of existing buildings to modern standards in such areas

as fire safety, access for the disabled, interior air quality, asbestos abatement and safe handling of dangerous or toxic materials.

31.5 However, historically, the management and maintenance of the facilities owned by the Organization throughout the various duty stations have suffered from low levels of funding for programmes of preventive maintenance and repair. As indicated in the reports of the Secretary-General on facilities management to the General Assembly at its forty-fifth and fiftieth sessions (A/45/796 and Add.1 and A/50/676), during periods of severe financial constraint, it is understandable that maintenance is frequently the first area targeted for reduced or deferred expenditure, in lieu of higher-priority substantive programme activities. As deferments occur a number of times, the cumulative effect leads to breakdowns and inevitably a substantial portion of the necessarily reduced budget allocation has to be redeployed from routine maintenance to unforeseen building repair emergencies. In addition, owing to the nature of capital improvement projects, a number of which require long lead times or summer season timetables, it often proves difficult to complete approved alterations and improvement projects during the biennium in which appropriations are granted. This results in the further deferral of those projects to future bienniums, owing to the unlikelihood of the completion of projects during the financial period.

31.6 A number of projects proposed for 1998-1999 are either projects that were already approved by the General Assembly but needed to be deferred owing to the overall reduced level of resources, the need to undertake other unforeseen emergency projects, or are a continuation of previously approved multi-year projects. As requested by the Advisory Committee on Administrative and Budgetary Questions, table 31.3 describes the value of those projects proposed under alterations and improvements and major maintenance that were deferred from prior period(s), multi-year phased projects, recurrent projects each biennium and new projects. As indicated, the proposals for the biennium 1998-1999, therefore, represent the continuing phase of a "catch-up" programme, which is expected to continue into succeeding bienniums and those projects which the organizational units have the capacity to implement within their existing structure. They do not reflect the level of resources that would be required to implement fully the programme of facilities management outlined in the above-mentioned reports of the Secretary-General.

Table 31.3 **Status of projects proposed for 1998-1999 by programme**
(Thousands of United States dollars)

	Headquarters	*United Nations Office at Geneva*	*United Nations Office at Vienna*	*United Nations Office at Nairobi*	*ESCAP*	*ECLAC*	*ECA*
Alterations/improvements							
Projects deferred from prior period(s)	570.2	70.5	—	—	—	904.9	—
Multi-year phased projects	3 000.1	1 831.7	—	334.5	—	25.0	50.0
New projects for 1998-1999	1 103.4	1 769.3	1 906.8	—	369.6	—	1 062.0
Total A	**4 673.7**	**3 671.5**	**1 906.8**	**334.5**	**369.6**	**929.9**	**1 112.0**
Major maintenance							
Projects deferred from prior period(s)	—	3 045.0	—	—	350.0	66.4	—
Multi-year phased projects	2 801.3	610.9	—	895.1	—	—	685.0
Recurrent projects	4 459.6	232.7	650.0	—	150.0	—	—
New projects for 1998-1999	2 188.0	825.9	—	347.5	2 588.0	816.4	360.0
Total B	**9 448.9**	**4 714.5**	**650.0**	**1 242.6**	**3 088.0**	**882.8**	**1 045.0**
Grand total	**14 122.6**	**8 386.0**	**2 556.8**	**1 577.1**	**3 457.6**	**1 812.7**	**2 157.0**

31.7 The estimate of total resources required is $34,069,800, consisting of provisions for alteration and improvement $12,998,000, and major maintenance $21,071,800. No resources are being requested for construction.

A. Construction

31.8 No resources are requested in 1998-1999 for construction.

B. Alteration and improvement

Resource requirements (at current rates)

1. United Nations Headquarters ($4,673,700)

31.9 The projects proposed for implementation at Headquarters during the biennium 1998-1999 include the following:

(a) *General facilities projects ($2,500,400)*

(i) Continuation of the long-term capital plan for United Nations facilities in New York ($1.5 million) that was initiated in part in 1996-1997. The objective of the long-term capital plan would be to identify existing and projected building deficiencies and requirements, planning and implementing a sequence of design and construction work to correct any critical long-term physical deterioration of the complex, to upgrade and retrofit mechanical and electrical systems and to meet the future needs in the most cost-effective and efficient manner possible. Although the Headquarters building has withstood the effects of age and the environment, deterioration has occurred, which in some cases has resulted in dangerous conditions affecting the safety of the building and its occupants. The plan proposed would include, *inter alia*, a survey of the resources, an analysis of short- and long-term building needs and an estimate of cost and realistic plans for financing the implementation of the plan and operation on a continuing basis and a summary of problems that are anticipated in implementing such a plan;

(ii) Continuation of a multi-year programme started in the biennium 1992-1993 to replace lighting fixtures in the Secretariat building with energy-efficient fixtures. The resources ($500,100) would provide for the replacement of motors, equipment controls and lighting controls in an effort to reduce utility costs;

(iii) General Assembly roof restoration ($500,300). Following the damage to the dome of the General Assembly building, it was found that various components had suffered deterioration, with leakage into the building experienced in 1996. In addition, roof insulation has become saturated, causing it to lose its insulating capacity;

(b) *Conference-servicing operations ($570,200)*. The replacement and upgrading of electronic equipment in the conference rooms of the Headquarters complex are part of a systematic modernization programme endorsed by the General Assembly in its resolution 34/14 E of 16 November 1982. During the biennium 1998-1999, it is proposed to continue the programme, started in 1992, with the installation of new simultaneous interpretation systems in Conference Rooms 6 and 10, which was deferred from 1996-1997;

(c) *Improvements of security and safety ($1,603,100)*

(i) Phase one of fire alarm upgrades is proposed following a study in February 1995 on the existing status of the fire alarm system at Headquarters. The study offered several options to bring the system into compliance with code requirements for life safety. The current anticipated total cost of the project would be between $2 million and $5 million (exclusive of design). Engineering design is expected to be completed in 1996-1997 and phase one, which would amount to $1 million, would be implemented in 1998-1999;

(ii) In certain areas, the Headquarters complex is not in compliance with local building regulations and safety codes. Major deficiencies include, *inter alia*, lack of separation between individual buildings and within floors, which is required both to control the spread of smoke and fire and

to control the size of a potential smoke area, obsolete controls at sprinkler systems, lack of required automatic controls for emergency situations, lack of smoke detection, lack of handicapped-accessible egress and non-compliant individual fire suppression systems at several locations. The resources requested ($603,100) would provide for corrective construction to address these building deficiencies.

2. *United Nations Office at Geneva ($3,671,500)*

31.10 The projects proposed for implementation during the biennium 1998-1999 relate to a number of projects to modernize and upgrade the buildings and technical installations at the United Nations Office at Geneva:

(a) *General facilities projects ($678,600)*

(i) Second phase of the renovation and modernization of the Medical Service area, which is both old and unsuitable for the needs of the Service, at a cost of $392,000. The resources requested would provide for both building work such as carpentry, painting and masonry, and technical work such as electrical and plumbing work;

(ii) Improvement of the catering service in the Palette area of E Building ($83,000), which has not been renovated since 1972. Proposed work includes installing a false ceiling, carpentry work, painting and technical work, such as electrical wiring and renovation of heating and ventilation installations;

(iii) Refurbishment of furniture in halls and corridors in old buildings ($94,000); in particular approximately 60 sofas would require renovation;

(iv) Resources in the amount of $70,500 would provide for the replacement of approximately 8,300 square metres of lawn in the Cour d'Honneur;

(v) Fees for construction and engineering consultants ($39,100);

(b) *Improvements of security and safety ($288,000)*. Access control and intrusion detectors ($288,000). It is proposed to continue with the installation of electronic access control and intrusion detectors linked to the newly developed Security Operations and Control Centre ($184,700), which was started in 1994-1995 in order to prevent unauthorized access and to enhance protection against intrusion and theft. To date, 27 doors have been equipped with such devices and 40 card-reading heads have been installed. In addition, installation of a video surveillance system ($103,300) commenced in 1996-1997 is to be continued and completed. Emphasis will be placed on complete coverage of the outside of the Palais and main passages inside;

(c) *Technical installations ($2,704,900)*

(i) Second phase of the improvement and replacement, of back-up lighting at the Palais, in conformity with regulations concerning back-up lighting, in particular in the corridors, basements, stairwells and certain large areas, and in E Building ($78,500);

(ii) Installation of automatic doors in lifts in accordance with local regulations ($233,000). In the old buildings of the Palais, 17 lifts have no car doors. According to new local regulations, and to avoid accidents, automatic doors are proposed for installation;

(iii) Second and final phase of the modernization of the building automation system, dating back to 1977, which monitors and regulates the air-conditioning and heating installations ($273,400);

(iv) Enhancement of the private automatic branch exchange (PABX) installed at the Palais des Nations ($831,200). In order to support new services, such as video conference activities, introduction of computer-telephony integration and so on, the resources requested are to enhance the telephone system to the Alcatel 4400 model;

(v) Upgrading of the Office's network ($277,000). In order to alleviate the limitations of routing performance, the resources requested would provide for the replacement of all routers with switches. This would introduce the concept of virtual local area network (LAN) on the network

and enable the acceptance of new multi-media applications on the backbone without jeopardizing the global quality of service;

(vi) Replacement of simultaneous interpretation equipment in the Council Room ($587,000). The present simultaneous equipment was installed in 1979 and is obsolete and subject to frequent breakdowns;

(vii) Technical and building works for the conversion into cyberspace areas of Rooms B133 and B137 of the Library for electronic research ($184,700). This would include power cabling, wiring and electrical panels for connection of office automation equipment to the campus network as well as building works to convert the room for such usage;

(viii) Development and enhancement of public information and telecommunication services ($240,100), which includes the installation of electronic notice boards in Halls 6 and 40 for display of the daily programme of meetings, as well as consolidation of the technical infrastructure (central telecommunications management under one platform — physical reconfiguration, hardware, cabling and so on).

3. United Nations Office at Vienna ($1,906,800)

31.11 Alterations and improvements at Vienna are governed by an agreement between IAEA, UNIDO and the United Nations, with UNIDO responsible for the Common Service. The requirements enumerated hereunder are not covered by the Common Fund for Financing Major Repairs and Replacements at the Vienna International Centre, Vienna's share of which is requested under major maintenance.

31.12 The requirements listed below represent a replacement programme in all areas of the buildings of the Vienna International Centre after 18 years' occupancy, to maintain an acceptable reliability of operations and to ensure the safety of the occupants. The proposals are based on a long-term replacement programme of worn-out installations and equipment subject to frequent breakdowns and the replacement of obsolete technology, which should generate savings in consumption (e.g. utilities). The resources requested represents the United Nations Office at Vienna's share of the total cost of the alteration and improvement works proposed for the biennium, a share based on a complex cost-sharing formula linked to occupancy and common areas.

(a) *General facilities projects ($417,500)*

(i) Phase 1 improvements to automatic chargers for improved emergency and conference lighting ($25,300). The current direct emergency lighting systems in the conference rooms and assembly rooms are old and unreliable, constantly breaking down and requiring repair;

(ii) Energy-saving measures with respect to the replacement of outdated, aged equipment and controls related to heating, ventilation and lighting to optimize energy consumption ($63,500);

(iii) Modification of access at Gate 1 for disabled persons ($41,000). In conjunction with the plans of the Vienna municipality to modify the subway station in 1998 at this gate area by installing lifts for disabled persons, the Vienna International Centre proposes to modify the gate to allow disabled persons access from the underground station to the premises;

(iv) Carpet replacement ($70,400). The Vienna International Centre has approximately 200,000 square metres of flooring, of which approximately 150,000 square metres are carpeted. A carpet replacement programme has been running since 1986 and the office area was completed in 1995. As part of the programme, carpeting in the conference rooms and cafeteria areas requires replacement in 1998-1999, no action having been taken in 1996-1997;

(v) Installation/replacement of catering requirements such as cool storeroom, hearth plates and so on and certain shelving and furniture of the cafeteria ($181,000);

(vi) Consultancy services ($36,300) are required for those areas where the Buildings Management Services or UNIDO do not possess the required resources such as special engineering tasks for replacement of installations/systems;

(b) *Improvements of security and safety ($369,700)*

(i) Closed-circuit television for ground surveillance system to ensure control of access to the premises (Buildings F and G) ($48,900). A closed-circuit television system for all entrances on level 3 must be installed to enable adequate control of access to the premises;

(ii) Modifications to Gate 1 facilities for improved security ($97,900). The resources requested would provide for modification to the gate to accommodate the improved security requirements and the modern checking equipment that was installed. Improvements include computerization of visitor passes issuance, x-ray checking of luggage and checking of persons;

(iii) Alteration and upgrading of fire detection installations in various areas ($12,600);

(iv) Safety inspections (checking and documentation) by an authorized firm in accordance with local regulations ($90,000) and implementation of corrective measures ($95,000). The Austrian rules and regulations for operation of buildings require specific checking, testing and inspection of installations to ensure safe conditions for staff, equipment, installations and systems;

(v) Closure of apertures in fire walls and fire protection barriers ($25,300). The fire protection at the Vienna International Centre includes closure of apertures in fire barriers, covering of supporting structures and so on. The protection needs periodic inspection and repair;

(c) *Technical installations ($1,119,600)*

(i) Replacement of old wiring and cables to ensure safe and reliable operation of technical equipment ($7,900);

(ii) Uninterrupted power supplies for alarm and communications systems ($12,600). Various battery systems for secured equipment are at the end of their life cycle and need replacement;

(iii) Improvement of measuring devices and counters ($36,000). By 1998, the consumption counters for water, electricity and cooling at the Centre would be more than 20 years old, providing inadequate precision and not able to be repaired;

(iv) Replacement of computerized building operation system enabling remote control of technical equipment for operation of heating/ventilation/air-conditioning (HVAC), electricity and so on ($400,000). As the system ages, frequent breakdowns require manual intervention, which, as the automatic preventive detection of failures cannot be secured, increases risk of major damage to buildings and technical equipment;

(v) Three-year replacement programme of the control system of the documents conveyor ($240,000), which has frequent costly breakdowns;

(vi) Replacement of outdated rotating convertors of elevators ($240,000). By 1998 the elevators would be 24 years old and the cost of maintenance and repairs is increasing;

(vii) Replacement of the control system of all lifts ($80,500). The equipment in the Vienna International Centre lifts was specially built for the buildings of the Centre and has reached the end of its life cycle. Further, the availability of spare parts is a problem and the reliability of operation cannot be guaranteed;

(viii) Replacement of cooling equipment in the catering areas, commissary and other locations, which are very old and obsolete and not in compliance with the Montreal Protocol ($71,000); this includes work related to the addition or alteration of air outlets and to new supply cables and distribution boxes;

(ix) Replacement of sanitary installations ($31,600). After 20 years of constant use, the sanitary installations are worn beyond repair and require replacement.

4. United Nations Office at Nairobi ($334,500)

31.13 Resources are requested for the following projects: installation of fire-alarm systems in the old building blocks and connection to the existing system ($41,000); installation/replacement of the existing obsolete closed-circuit television system to enable improved electronic surveillance of the perimeter and provide better security and control of the premises ($102,000); maintenance and continuation of the landscaping of the grounds ($40,000), particularly the southern and northern areas with the encroachment of bushland; and improvements to the conference-servicing facilities, with the upgrading of existing audiovisual equipment ($151,500).

5. Economic Commission for Asia and the Pacific ($369,600)

31.14 The projects proposed for implementation during the biennium 1998-1999 relate to the following:

(a) *Rationalization of space* in the Secretariat and the Service Building with the repartitioning of offices for substantive divisions ($169,600) in line with the review of space allocation conducted in 1996 to be further reviewed in 1998-1999;

(b) *Improvement of the dry/wet garbage storage facility ($50,000)*. The existing dry garbage storage facility (external buildings) is in need of replacement, having been in use since 1975. In addition, with the wet storage facility in the Conference Centre (for kitchen garbage) located within the building adjacent to the main equipment/goods receiving areas and print shop, problems have constantly been encountered with odour, difficulty with washing down and so on. The resources requested would provide for a new dry/wet garbage store outside the buildings;

(c) *Additional fire escape for the Service Building to meet safety evacuation requirements ($150,000)*. International standards require that escape stairs be provided in sufficient numbers and of sufficient capacity to allow all occupants to escape a fire within a certain time limit. At present the Service Building has an inadequate number of stairs for safe evacuation.

6. Economic Commission for Latin America and the Caribbean ($929,900)

31.15 Resources requested under alterations and improvements relate to the following projects:

(a) *Continuation of general facilities projects ($784,900)*. Replacement of existing substandard office panels with acoustical, insulated and fire-protected panels ($460,000); installation of false ceilings and insulation in walls to promote energy conservation ($20,000); installation of a labour-saving automated lawn sprinkler system in the south garden of the complex ($28,000); modernization of fire exit staircases in compliance with current code requirements and to improve handicapped access ($45,000); and the start of a multi-year project of installation of workstations for improved space utilization ($231,900);

(b) *Continuation of technical installation projects ($145,000)*. Upgrading of all electrical wiring in the buildings to support increased power demands arising from technological innovations ($120,000) and the final stage of the extension of the fire protection and security detection system ($25,000).

7. Economic Commission for Africa ($1,112,000)

31.16 The resources requested would provide for:

(a) *Continuation of general facilities projects ($230,000)*. Roof renovation works ($140,000), including construction of a glazed roof over the connection between the old and new office buildings; upgrading of the old conference rooms ($40,000); and toilet renovation of the old buildings of the north wing ($50,000);

(b) *Technical installation ($290,000)*. Replacement and upgrading of generators, in particular with the changes in office automation equipment and technology requiring LAN support;

(c) *Improvements of safety and security ($592,000)*. Presently the premises (excluding the Conference Centre) are not protected by any video camera surveillance or anti-intrusion alarm system. It is proposed that the existing security of the Conference Centre system be enhanced by locating additional video cameras on the periphery of the entire ECA complex and linking them to a central monitoring system.

C. Major maintenance

Resource requirements (at current rates)

1. United Nations Headquarters ($9,448,900)

31.17 The resources requested would provide for the continuing critical maintenance activities at Headquarters. The physical plant at Headquarters is in urgent need of increased preventive and corrective maintenance owing to the age and obsolescence of the existing infrastructure, building systems and associated controls and protection systems. The integrity of the buildings and the reliability of the health and safety systems will be compromised without well-planned and timely maintenance, phased replacement of critical protective elements and implementation of long-term capital planning.

31.18 The resources requested would provide for the essential maintenance activities carried out by the in-house staff, as well as a number of activities in the areas of gardening, carpeting, painting, carpentry, general maintenance and HVAC that will be contracted out on an "as-needed basis", activities formerly assigned to a number of Trades and Craft category posts proposed for abolition through attrition under section 27D of the proposed programme budget for the biennium 1998-1999. The following projects are proposed:

(a) *Heating, ventilation and air-conditioning ($1,633,300)*. The resources requested would provide for repair and refurbishing of the equipment in the compressor room, various fan/machine rooms and perimeter window units; all pumps, conveyors and dumb waiters; the maintenance of indoor air quality, which involves duct cleaning, filtration, servicing of temperature and humidity controls; repair/replacement of heat exchangers and repair and refurbishing of refrigeration and air-conditioning systems servicing the broadcast, communications, data processing and food storage areas;

(b) *Electrical maintenance ($495,900)*. The projects proposed, to be undertaken by an outside contractor, include maintenance and replacement of regular and emergency lighting fixtures and associated ballasts, transformers and lamps throughout the complex; replacement, refurbishing of selected motor control centres, switchgear boards, power distribution panels, contactors, dimmer controls, bus bars, smoke, fire alarm and security systems; and modifications/expansions of the existing electrical and LAN outlets to suit the space occupancy and functionality;

(c) *Plumbing maintenance ($613,700)*. The resources requested would cover replacement of defective piping and valves, heating and cooling coils; damaged or inefficient water supply fixtures with water-efficient bathroom fixtures; plumbing gratings, traps, vents; fire suppression water systems; and drainage systems throughout the complex;

(d) *Replacement of carpets, curtains and upholstery work ($990,800)*. The conference rooms and public spaces in the Conference Building and the public spaces in the General Assembly Hall have suffered excessive wear and tear owing to heavy usage and now pose a potential safety risk. Though a part of the work of this multi-year carpet replacement project was also budgeted in 1996-1997, full implementation of this programme during 1998-1999 is required as damage to the spaces in the Conference and General Assembly Buildings has been escalating. An amount of $800,000 relates to contracting out carpet replacement for Conference Room 2, the Security Council, Economic and Social Council and Trusteeship Council Chambers and the General Assembly Hall second floor corridor and for the replacement of curtains and venetian blinds throughout the complex, as well as for the re-upholstering of conference room furniture. The remaining amount is requested for the

repair/replacement of damaged carpets, venetian blinds and damaged furniture in other general areas of the complex;

(e) *Carpentry ($576,300)*. The resources requested would provide for the refurbishing of all conference rooms' wooden doors, tables and side panels, selected panels and furniture in all buildings and an out-sourced contract for miscellaneous carpentry work. Further, the resources would cover the refurbishment of all the deteriorating wooden panels, doors and trims in the Library building auditorium;

(f) *Painting ($252,700)*. Painting projects are proposed for various areas of the complex. The bulk of the activities would be undertaken through out-sourced contracts on an "as-needed basis";

(g) *General maintenance ($887,700)*. Resources under this heading would provide for the replacement of the Secretariat Building spandrel glass panels between floors, glass panes throughout the rest of the complex, vinyl floor tiles, doors and sheetrock panels throughout the complex, repair of blue stones, potholes and curbing; upgrade of the hardware and software and materials for the sign shop; replacement/repair of the hardware and controllers for various doors; maintenance contract for the lawns and gardens; replacement and maintenance of indoor and outdoor plants; and installation of lawn sprinklers;

(h) *Asbestos abatement and environment testing ($1 million)*. The multi-year asbestos abatement programme, started at Headquarters during the biennium 1988-1989, will continue during 1998-1999 in selected areas of the complex, in accordance with technical guidelines, air quality surveys and existing conditions. In view of the ageing building system and infrastructure elements, this project remains essential;

(i) *Health and safety code-related maintenance upgrades of escalators, elevators, back-up power and life safety systems ($764,000)*. The resources requested would provide for improving the safety systems for the existing escalators and elevators, bringing them in line with industry standards, improve the communications and centralized monitoring of the elevators and escalators, provide back-up power for safer evacuation and operations and improve the testing and notification systems for the critical life-safety systems throughout the complex;

(j) *Structural and architectural maintenance ($2,234,500)*. A number of projects are proposed under this heading:

(i) Repair and waterproofing of first and second basement garage slabs ($1 million). Although work relating to this project had to be undertaken on an emergency basis in the biennium 1996-1997, the completion of the project will extend into 1998-1999. Sections of the garage slab have deteriorated to the point where vehicles cannot be permitted to drive through or park on or below them. Though corrective work has commenced, resources are now requested to undertake waterproofing to correct the deterioration in the concrete and the resultant destruction of the slabs and rusting of the metal reinforcement caused by road salt carried in by vehicles;

(ii) Phase 2 of the Peace Bell Court ($205,000). Design of the basic replacement work required to restore the integrity and waterproof quality of the Peace Bell Court is to be undertaken during 1996-1997, leaving the adjacent area (south of the General Assembly Building) to be undertaken and completed in 1998-1999. The work would also include planters and landscaping around the Peace Bell;

(iii) Building envelope repair work ($505,500). Climactic conditions have resulted in deterioration in the metal of the building facades over the years, caulking has aged and mortar joints have washed away. These openings allow water to enter the structure, causing further damage. During 1998-1999, it is proposed to address the worst affected areas to prevent further deterioration and more costly future repairs;

(iv) Major concrete repair at the perimeter of the General Assembly Building ($424,000). This is a new project proposed for 1998-1999 to address the deterioration of exposed concrete, which has accelerated at the concrete areas east, west and south of the General Assembly Building,

including the external emergency exit stairs. The deterioration causes leaking, which in turn causes rusting and expansion of structural reinforcing, further accelerating deterioration. The concrete in several areas is crumbling and prompt action is required to correct this situation and to allow the areas to continue to be safely used;

(v) Maintenance of the residence of the Secretary-General ($100,000). The resources requested would cover, *inter alia*, replacement of the main heating distribution system, upgrading the electrical distribution and lighting, replacement of hot and cold water piping and replacement/upgrade of window air-conditioning units; and repairs needed to preserve the architectural and structural integrity of the residence.

2. *United Nations Office at Geneva ($4,714,500)*

31.19 As part of the continuing major maintenance programme, the following projects would be undertaken during the biennium 1998-1999:

(a) *Building structures and grounds ($1,426,700)*

(i) Replacement of drain pipes and sanitary equipment ($39,200). Continuation of the programme of replacement of horizontal drain pipes running under sanitary installations in the Palais and its annexes, which have been in service for more than 64 years, and replacement of sanitary equipment, much of which dates from the time of the League of Nations;

(ii) Replacement of water distribution pipes in the buildings ($39,300). Continuation of the programme of replacement of pipes used for water distribution in the buildings (hot water, cold water, chilled water, etc.) and outside (connections for watering the grounds, fire hydrants, etc.), after more than 64 years of service;

(iii) Multi-year refurbishment programme of offices in the old buildings ($200,300). It is proposed to renovate approximately 50 to 80 offices;

(iv) Replacement of double glazing ($39,200). Owing to their dilapidated condition, the double-glazed windows in E Building are no longer airtight and suffer from declining insulation efficiency;

(v) Continuation of the programme of repair of paved areas (roads) and car parks ($78,500);

(vi) Building roof repairs ($78,500). Continuation of the programme for the maintenance of flat roof areas to avoid water infiltration;

(vii) Refurbishment of corridors in the old building owing to their dilapidated condition. The resources requested ($62,900) would provide for sanding of walls and ceilings and cleaning of cable ducts;

(viii) Refurbishment of wood panelling ($62,900). The wood panelling and tables in Room 8, a gift from the Government of Denmark at the time of construction of the Palais in 1936, require refurbishment. This project was deferred from the biennium 1996-1997;

(ix) Full renovation of Room C108 (lighting, cabling, floors etc.), which is used frequently owing to its proximity to the Council Chamber ($111,200);

(x) Refurbishment of Reading Rooms B340 and B348 in the Library, which have not had restoration work performed since 1971 ($196,300);

(xi) Refurbishment (building and electrical work) of wing corridors on the third floor, between the Assembly Building and the Council Building and the Library Building ($204,200). No restoration work has been performed since 1972;

(xii) Renovation of the armillary sphere and its pond (Wilson Memorial Sphere), with last major maintenance work to the sphere having been conducted in 1983 and to the pond in 1971 ($314,200);

(b) *Technical equipment and installations ($3,214,800)*

(i) Replacement of lifts ($432,000). After a number of years of intensive use, lifts 29 and 30 (29 years of operation) require replacement and modernization. The resources requested would provide for a duplex operating lift system in order to halve the number of trips and reduce wear and energy consumption;

(ii) Overhauling and modernization of generator sets ($346,600). There are four emergency generators at the Palais, installed in the early 1970s. The two oldest generators were fully overhauled previously and resources are now requested to cover the cost of overhauling the remaining set;

(iii) Fees for architects and construction and engineering consultants ($232,700);

(iv) Replacement of boilers at the Palais ($2,203,500). In 1990-1991 one boiler was replaced but replacement of the other three main boilers was postponed. However, during the past years burst pipes of the boilers, which have been in operation for over 30 years, require attention. Replacement of the boilers has also been advised by the Swiss Association of Technical Inspectors in charge of official and periodic inspections of the boilers;

(c) *Improvements of security and safety ($73,000)*. Repair and maintenance of fences surrounding the Palais grounds, approximately 3,500 metres ($73,000). In some areas, the railings surrounding the Palais are in poor condition, allowing easy entry. Consequently, it is proposed to raise some fences, main gates and turnstiles at two external entrances of the Palais.

3. United Nations Office at Vienna ($650,000)

31.20 Under the terms of the 1981 Agreement on the Common Fund for Major Repairs between the United Nations, IAEA, UNIDO and the Government of Austria, each of the four parties to the agreement has to date been required to contribute $25,000 annually to the Common Fund. In addition, disbursements made for major repairs and replacement are to be reimbursed into the Fund in equal shares by the parties during the subsequent year, on the understanding that no party shall be required in any one calendar year to make a total payment in excess of $150,000. However, the Government of Austria would be financially liable to meet that portion of the cost in any one calendar year which may exceed the financial liability of the organizations.

31.21 The terms of the Agreement were to be reviewed initially after 10 years (i.e. in 1991) and subsequently every 5 years. However, renegotiation was not pursued in 1991 by the Government of Austria or the organizations, and the status quo prevailed through the biennium 1994-1995. During negotiations in 1996-1997, agreement was reached on the financial liability of each of the organizations at the Vienna International Centre. The revised rates required a contribution by each organization of an amount not exceeding $325,000 per annum, being the sum of the contribution to the working capital of the Common Fund and the maximum total reimbursement for actual expenditures. The revised rates took effect in 1996 and are subject to review in the year 2000.

31.22 The resources requested by the United Nations Office at Vienna ($650,000) correspond to its share for the biennium under the terms of the quadripartite Agreement on the Common Fund for Major Repairs.

4. United Nations Office at Nairobi ($1,242,600)

31.23 As part of the continuing major maintenance programme, the following projects are proposed by the United Nations Office at Nairobi during the biennium 1998-1999:

(a) *Building structures and grounds ($582,500)*. External repair and maintenance work on buildings, including the roofs, facades and fencing perimeter ($120,900); repair and maintenance of the concealed drainage system ($10,900); replacement of carpets in offices, conference rooms and lounges ($151,500); repair to the asphalt areas of the main entrance and car parks ($177,200); replacement of the main kitchen floor ($22,200); replacement of PVC tiles in the old building-block staircases ($11,100); partition material, including door locks ($53,200); and termite treatment of buildings ($35,500);

(b) *Technical installations ($660,100)*. Resources requested would cover the maintenance of the solar heating system ($31,000); spares for technical installations ($110,800); upgrading of the generator exhaust system and emergency generators ($25,500); upgrading of the high-voltage transformer (HT), including the power distribution system in the old blocks ($32,000); maintenance and upgrading of catering equipment, including the chiller rooms ($146,600); upgrading of HT main switch disconnecter and other switch gear ($49,600); upgrading of power lighting in Conference Rooms 1, 2, 3 and 4 ($58,500); installation of fire hose reels system and fire hydrants ($66,400); replacement of water control sluice valves ($14,200); extension and rehabilitation of irrigation system ($52,000); and cleaning and rehabilitation of the oxidation pond system ($73,500).

5. Economic and Social Commission for Asia and the Pacific ($3,088,000)

31.24 The resources requested under major maintenance would enable the continuation of the established long-term maintenance programme on the buildings at ESCAP, which, in the case of the Secretariat and Service Buildings, will be over 20 years old. The major projects planned for 1998-1999 are the following:

(a) *Building structures and grounds ($417,000)*. Repainting of the Service Building parking areas, parking bays and repairs to the Conference Centre glaze-cote ($50,000); remedial work to the Conference Centre's external hard landscaping: waterproofing of planters, replacement of marble paving to flagpoles and repair to damaged granolithic areas of the Conference Centre garden ($342,000); and improvement of maintenance access systems of the Conference Centre, including crawling boards to prevent damage to tiled roofs, access to high-level windows and improvement to the safety rail ($25,000);

(b) *Technical installations ($2,641,000)*. Replacement of air-conditioning chiller plant unit No. 1 using chlorofluorocarbons, in accordance with environmental legislation ($350,000); regular programmed annual maintenance of the 69-kilovolt high-voltage gas-insulated switch gear ($100,000); replacement of the main 69KV electrical switchgear and transformer, since the substation constructed in 1974-1975 to provide power to all buildings in the complex is at the end of its working life ($1,521,000); installation of fire protection systems for the new 69KV electrical switchgear and transformers, including necessary structural alterations as per local building codes ($200,000); replacement of electrical starter equipment for air handling units ($200,000); replacement of the Conference Centre UPS batteries, which by 1998-1999 will have exceeded their life expectancy ($20,000); replacement of the fresh air unit that supplies outside air to the buildings ($100,000); and replacement of septic tank/upgrading of waste water treatment plant ($150,000);

(c) *Improvements of security and safety ($30,000)*. Installation of an uninterrupted power supply system for fire escapes in the Secretariat Building as back-up to the emergency generator for internal fire escapes.

6. Economic Commission for Latin America and the Caribbean ($882,800)

31.25 The resources requested would provide for the continuation of the multi-year maintenance and repair of the building structures and grounds of ECLAC, as well as the technical installations. The projects proposed in 1998-1999 are:

(a) *Building structure and grounds ($251,500)*. Waterproofing and rearrangement of HVAC equipment on the roof of the Documents Research Centre Building ($85,400); sealing the bottom of the pond and repaving the adjoining road surface ($33,200); changing floor tiling in the Main Building ($66,400); replacement of the floor in the auditorium, which has deteriorated over the past 12 years ($33,200); and installation of non-active (dry, stand-by) piping to complete fire protection installations ($33,300);

(b) *Technical installations ($631,300)*. Replacement of a major part of the fresh air intake and ventilation system in the Main Building, with a modern automatic zone control and temperature regulation system ($218,300); overhaul of air-conditioning equipment in the main building ($52,200); installation of a boiler for the North Building ($38,000); replacement of the air-conditioning system in the Main Building's "Zocalo" area ($23,700); replacement of a 30-year-old generator in the Main

Building ($57,000); change of the cool room and compressor in the kitchen installations in order to comply with current hygiene and health standards ($47,500); change of the sewerage elevation system and hydropneumatic electrical panel ($47,500); change of the diameter of the main sewerage line in the ECLAC compound to ensure effective release of waste ($42,700); and installation of a stand-by air-conditioning compressor unit in the North Building and the documents reproduction area ($104,400).

7. Economic Commission for Africa ($1,045,000)

31.26 Major emphasis during the period will be on improvements and upgrading of existing old facilities to guarantee functionality of the structures and equipment. Projects proposed relate to the renovation of (a) the Africa Hall Building and (b) the New Office, Library and Cafeteria Buildings, and (c) to the rehabilitation of the old office building:

(a) *Renovation of the Africa Hall Building ($250,000)*. Constructed over 37 years ago, the building requires major maintenance as a result of constant usage and harsh climactic conditions. The resources requested would provide for replacement of metal-glazed frames and windows that are defective and need change and fixing of new venetian blinds ($35,000); renovation of ceiling ($25,000); conference-servicing systems and equipment ($40,000); and renovation of the rotunda ($150,000);

(b) *Improvements and renovations to the New Office, Library and Cafeteria Buildings ($200,000)*. The resources requested would provide for upgrading of the fire alarm system ($25,000); upgrading of the electrical and generator set installations and panel board ($50,000); rehabilitation of HVAC system ($35,000); replacement of movable partitions, wall panels and doors for reasons of acoustics and functionability ($45,000); and renovation of the kitchen, new building and Library basement ($45,000);

(c) *Rehabilitation of the old office building ($595,000), constructed over 40 years ago*. The resources requested would cover the weather proofing of the metal-glazed frame walls on the east and west sides ($65,000); replacement and interconnection of the fire alarm system and fighting systems with the new Conference Centre alarm system for centralized monitoring ($80,000); reconstruction of corroded and leaking water and sewer systems ($75,000); office space redesign, with the installation of light-weight partitioning ($115,000); upgrading of electrical and generator set installations ($95,000); waterproofing and renovation of external facade ($85,000); replacement of former garage space and the Staff Union Office with solid walls in place of temporary partitions ($40,000); and renovation of the entrance area, with a security desk/monitor ($40,000).